

Wisconsin Youth Tobacco Survey 2000

Knowledge, Beliefs, and Social Influences

Prepared by the

Bureau of Chronic Disease Prevention and Health Promotion
Division of Public Health
Department of Health and Family Services
PPH 43027 (09/01)

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Background & Methods

Purpose

The Wisconsin Youth Tobacco Survey (WYTS) is a new comprehensive measure of youth tobacco use in Wisconsin. The WYTS tracks tobacco use, attitudes, and related behaviors among public school students enrolled in middle and high school (grades 6-12).

The 2000 WYTS is the most comprehensive data set to provide valid statewide estimates of tobacco use among the Wisconsin public middle and high school student population. Of note, it is also the first statewide data collected on tobacco use among middle school youth.

The first report regarding this survey, *Prevalence of Tobacco Use*, was released November 20, 2000 and is available on the Tobacco Control Program web site: <http://www.dhfs.state.wi.us/health/TobaccoControl> or at the address listed at the end of the section.

This first report suggested an important decrease among high-school smoking teenagers of 5% from a rate of 38% in 1999 to the current level of 2000 of 33%.

Wisconsin's 1999 data was measured by a survey called the Youth Risk Behavior Survey (YRBS), that included smoking as one of many at risk behaviors (with less detailed analysis of the reasons for smoking). According to the Centers for Disease Control and Prevention's Office on Smoking and Health, several unpublished studies have shown fairly high reliability between the two surveys on the issue of smoking rates. This CDC Office stated that the amount of decrease in one year in Wisconsin has so far exceeded preliminary data from most other states, but that in general rates appear to be moving slightly downward nationwide. It will take several more years of data to ensure a continuing drop in this age group in Wisconsin, as well as across the nation.

This report will primarily focus on findings regarding a number of potential social and familial influences on teenage smoking.

We will provide following each section a brief analysis of the importance of the findings covered in several tables.

Background

According to national experts on the danger of smoking, the following principles are potentially linked toward a particular youth's risk of smoking onset and a transition toward "regular smoking behavior"; general knowledge; attitudes; and intentions¹. Some factors that may contribute toward youth smoking behavior have also been summarized in the following manner:

- (1) "behavioral intent to smoke" (a general measure of the intention among youth who have never smoked to remain nonsmokers)
- (2) parental involvement
- (3) their own and their friends attitudes toward the social/cultural appeal of smoking
- (4) knowledge and attitudes toward the health risks of tobacco use
- (5) exposure toward potential peer pressure for tobacco use.²

¹ U.S. Department of Health and Human Services. *Preventing Tobacco Use among Young People: A Report of the Surgeon General*. Washington, DC: U.S. Government Printing Office, 1994. Also available at www.cdc.gov/tobacco/sgryth2.htm.

² Pierce JP, et al. Validation of susceptibility as a predictor of which adolescents takes up smoking in the United States. *Health Psych* 1996;15(5):355-361.

The knowledge of such attitudes and intentions may also help monitor the impact of advertising campaigns, school curricula, and youth empowerment effort aimed at reducing tobacco use. National researchers have postulated links between such attitudes and intentions and higher rates of smoking initiation and continued teen age and adult age smoking.³

Methods

The Department of Health and Family Services (DHFS), Department of Public Instruction (DPI), and school districts across Wisconsin cooperated in the survey administration. Surveys were administered during the months of March, April, and May 2000 in 82 randomly chosen schools through a contract with the Department of Preventive Medicine, University of Wisconsin, Madison. The WYTS questionnaire was initially developed through work of the American Legacy Foundation, the Office of Smoking and Health at the CDC and national experts and was adapted for use in Wisconsin.

The 2000 YTS was funded through the Wisconsin Thomas T. Melvin Youth Tobacco Prevention and Education Program, Division of Public Health, DHFS.

Public schools containing the grades 6, 7, or 8 (for middle schools) or 9, 10, 11, or 12 (for high schools) were included in the potential survey sample. A sample was chosen by standard scientific methods of potentially eligible schools.⁴

All students in the selected classes were eligible to participate in the survey. The same WYTS questions and definitions were used for both the high school and middle school surveys.

Thirty-eight of 49 randomly selected middle schools participated in the Wisconsin Youth Tobacco Survey.

Forty-four of 50 randomly selected high schools participated in the Wisconsin Youth Tobacco Survey.

Of the 1,626 middle school students eligible in these participating classes, 1,440 (89%) completed questionnaires.

Of the 1,565 high school students eligible in these participating classes, 1,307 (84%) completed questionnaires.

Technical/Statistical notes

The survey results stated in this response have undergone a common sophisticated statistical technique called weighing. This technique compensates for “non-responders” (both the schools and students who did not take part in the survey-when eligible) to better reflect the overall middle and high school population.

Data findings by county, region, or racial/ethnic group were not reported due to the small numbers demonstrated for many of these populations in the survey sample. Any school (sample) that surveyed less than 50 students were not been reported due to concerns with statistical validity. (Stated another way, the number of participants in these schools did not reach accepted standards for presenting findings to ensure valid and repeatable results.)

All calculated values have been rounded to the nearest whole number.

In the summary table at the end of this report, we also reported confidence intervals. This is a common statistical technique that attempts to determine the degree of “uncertainty” that the stated number is actually correct. The

³ Pierce JP, et al. Tobacco industry promotion of cigarettes and adolescent smoking. *JAMA* February 18, 1998; 279(7):511-515.

⁴ The sample was randomized.

confidence interval range in that table is determined by adding and subtracting the number stated from the percentage stated.

Confidence intervals shows a range of values for which we are 95% sure that the value surveyed did actually fall within the stated bottom and top number. Normally, the narrower the confidence interval, the more certain we are that our stated number is close to being the correct percentage.

Disclaimer

This report is based only on data from the year 2000. As such, it has potentially strong limitations in regards to tracking of trends in behaviors, perceptions and risk factors that may be of importance in understanding why youth smoke in Wisconsin and how best to devise strategies to prevent and reduce use.

Nevertheless, this report should help provide a baseline understanding of the influences toward smoking behavior and attitudes on smoking behavior in the middle school and high school years. This data will be also be used in conjunction with other local and national data that explores similar topics.

The Wisconsin Tobacco Control Program

The Wisconsin Tobacco Control Program is located within DHFS (Bureau of Chronic Disease Prevention and Health Promotion, Division of Public Health) is committed to reducing the burden of tobacco in Wisconsin.

The Program, in collaboration with Wisconsin local health departments and other community organizations active in tobacco control, works towards the following goals:

- ❖ **Eliminate Exposure to Environmental Tobacco Smoke**
- ❖ **Reduce Smoking Initiation among Youth**
- ❖ **Promote Quitting among Adults and Young People**
- ❖ **Identify and Eliminate Health Disparities Among Population Groups**

For more information or reprints of this report write to:

**DHFS/DPH/CDPHP
Tobacco Control Program
ATTN: Julie Morello
P.O. Box 2659
Madison, WI, 53701-2659**

This information will also be found on the Tobacco Control Program web site at:

<http://www.dhfs.state.wi.us/health/TobaccoControl>

Acknowledgements

Many dedicated persons contributed to the 2000 WYTS survey and analysis. We especially wish to thank all the participating students, teachers and principals.

Beliefs about Social Appeal of Smoking

Questions and Definitions

Middle and high school students were asked the following questions:

❖ *"Do you think young people who smoke cigarettes have more friends?"*

Response Options were: (a) definitely yes (b) probably yes (c) probably not (d) definitely not.

Grouping of Respondents for Figures 1 and 2: a student who thought young people who smoke cigarettes have more friends was defined as responding with (a) definitely yes; or (b) probably yes.

Results

Figure 1. Believe smokers have more friends, by gender, Wisconsin middle and high school students

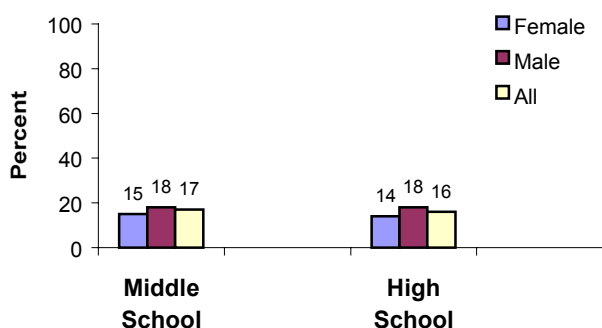
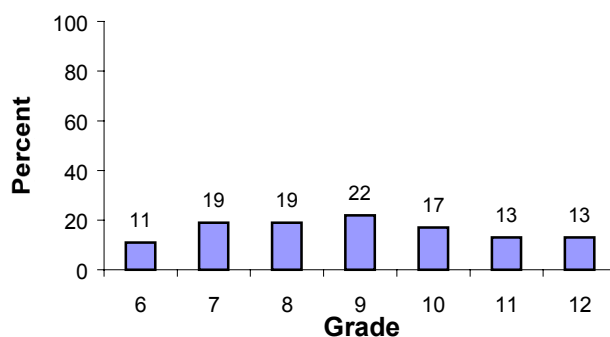


Figure 2. Believe smokers have more friends, by grade, Wisconsin middle and high school students



- Seventeen percent of middle and 16% of high school students thought smokers have more friends.
- Female students were less likely than males in both middle and high school to believe smokers have more friends.
- This perception peaked in the ninth grade and declined through high school.

❖ *"Do you think smoking cigarettes makes young people look cool or fit in?"*

Response Options were: (a) definitely yes; (b) probably yes; (c) probably not; and (d) definitely not.

Grouping of Respondents for Figures 3 and 4: students who thought smoking made young people look cool or fit in was defined as responding either (a) definitely yes or (b) probably yes.

Results

Figure 3. Believe smoking cigarettes makes young people look cool or fit in, by gender, Wisconsin middle and high school students

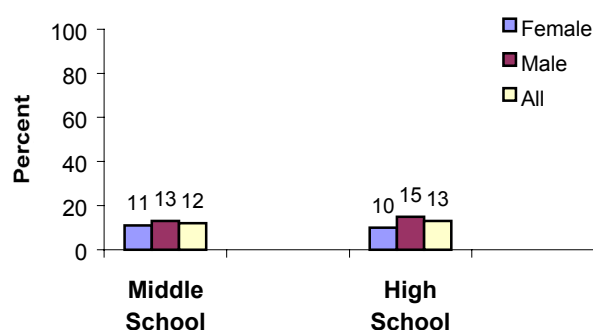
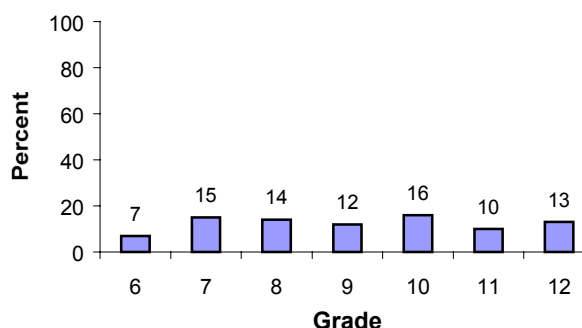


Figure 4. Believe smoking cigarettes makes young people look cool or fit in, by grade, Wisconsin middle and high school students



- A similar percentage of students in middle school (12%) and high school (13%) thought that people who smoke “look cool or fit in”.
- In middle school, 11% of females and 13% of males thought it looked cool to smoke.
- In high school, males were 1.5 times more likely to think smoking looked cool (15%) than females (10%).

Section Discussion: Beliefs about Social Appeal of Smoking

The section suggested that there is good news for anti-smoking efforts targeted at our youth. For example, less than 20% of students believed that they would have “more friends if they smoked or will look cool”. Such trends were suggested in Figures 2 and 4.

These beliefs appeared to peak in the 10th grade - then diminishes in high school. Wisconsin’s data findings were consistent with most other states that have discussed their survey findings with the CDC.⁵

The data in Figure 3 strongly suggested that males harbor a greater prevalence of the idea that it is “cool to smoke”. This was not an unexpected finding.

⁵ Personal Communications, Peter D. Rumm, MD, MPH, with the Office on Smoking and Health, Center for Chronic Disease and Health Promotion, Centers for Disease Control and Prevention, March 2001.

According to the CDC, there is a growing body of literature that references researchers exploring why males appear to be at a higher risk than females for engaging or endorsing a number of potentially adverse health or social behaviors. In both genders, understanding the interaction of both potential cultural and biological determinants (causes) will continue to receive more emphasis in future studies.⁶

⁶ Personal Communications, Peter D. Rumm, MD, MPH, with Division of Adolescent and School Health, Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, March 2001.

Social Influences

Questions and Definitions

Middle and high school students were asked the following questions:

❖ *"How many of your four closest friends smoke cigarettes?"*

Response Options were (a) none; (b) one; (c) two; (d) three; (e) four; and (f) not sure.

Grouping of Respondents for Figures 5 and 6: a student who had one or more smokers among their four closest friends was defined by answering yes in the range of 1-4 (potential responses b-e). A response to (a) none, was considered a "negative" response.

Figure 5. One or more smokers among their four closest friends, by gender, Wisconsin middle and high school students

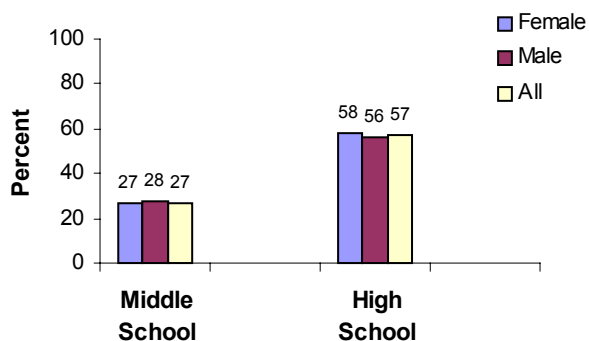
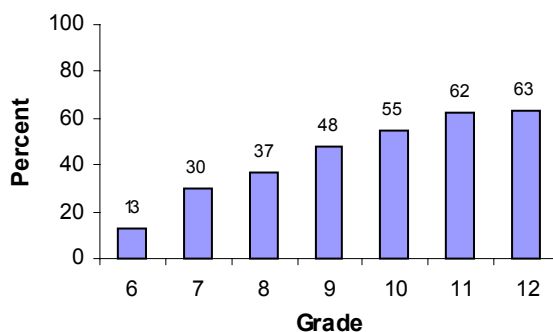


Figure 6. One or more smokers among their four closest friends, by grade, Wisconsin middle and high school students



Results

- Among middle school students, 27% of females and 28% of males reported that at least one of their four closest friends smokes cigarettes.
- As students progress through school, there was a trend toward having at least one close friend whom they consider a smoker. There was a steady progression among the percent of smokers among closest friends from 13% in the 6th grade to 63% in the 12th grade.
- On average in high school, 58% of females and 56% of males indicated one of their four closest friends are smokers.

❖ *"Does anyone who lives with you now smoke cigarettes?"*

Response Options were: (a) yes (b) no.

Grouping of Respondents for Figures 7 and 8: a student living with someone who currently smokes cigarettes was defined simply as responding to (a) yes.

Figure 7. Lives with someone who currently smokes cigarettes, by gender, Wisconsin middle and high school students

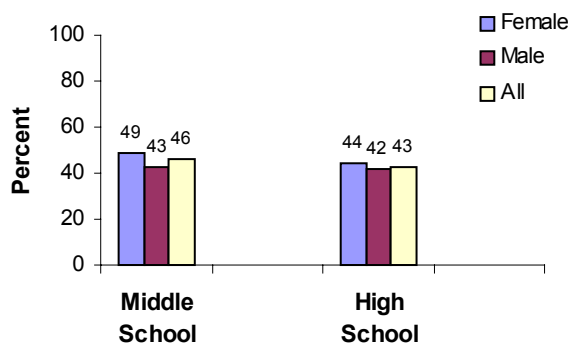
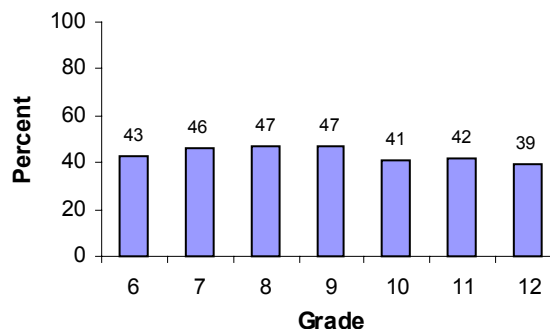


Figure 8. Lives with someone who currently smokes cigarettes, by grade, Wisconsin middle and high school students



- Forty six (46) percent of middle school and 43% of high school students reported they lived with someone who currently smokes cigarettes.
- In high school this rate dropped to a low of 39% in the 12th grade.

Section Discussion: Social Influences

There was a suggestion of at least three preliminary patterns:

- 1) By their high school years, over half of teenagers were exposed to at least one friend who smokes.
- 2) Smoking by a close friend or friends did not seem to prevent such friendships from continuing.
- 3) There was little statistical difference in the rates of males and females in having at least one close friend who is a smoker.

In 1998, the average rate of smoking by adults in this state was 23%. Unpublished 1999, Behavioral Factor Risk Surveillance Survey Data for Wisconsin found that only 22% of adults in Wisconsin stated they were exposed to smoking in their home.⁷

However, the 2000 YTS found much higher rates of home exposure for students, suggesting that teenagers live with at least one adult or multiple adults who potentially smoke at rates above that of the general population.

There is no clear answer for why students in the later high school years seem to be exposed to less adult smoking.

⁷ Wisconsin Behavioral Factor Risk Surveillance System (Survey), Division of Health Care Financing, DHFS, State of WI, 1998.

Beliefs of Health Risks of Smoking

Questions and Definitions

Middle and high school students were asked the same following three questions:

❖ *"Do you think young people risk harming themselves if they smoke from 1-5 cigarettes per day?"*

Response Options were: (a) definitely yes; (b) probably yes; (c) probably not; and (d) definitely not.

Grouping of Respondents for Figures 9 and 10: a student who think they risk harmed if they smoke 1-5 cigarettes a day was defined as responding either (a) definitely yes; or (b) probably yes.

Results

Figure 9. Believe health risks of smoking 1-5 cigarettes a day, by gender, Wisconsin middle and high school students

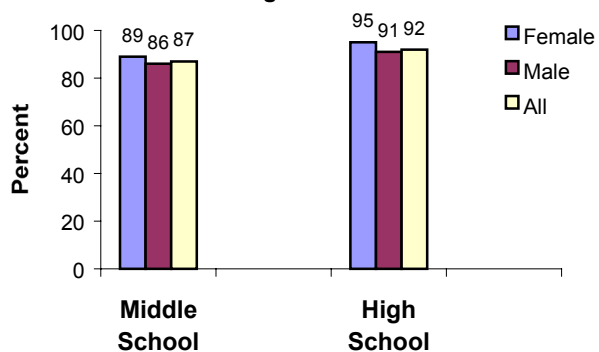
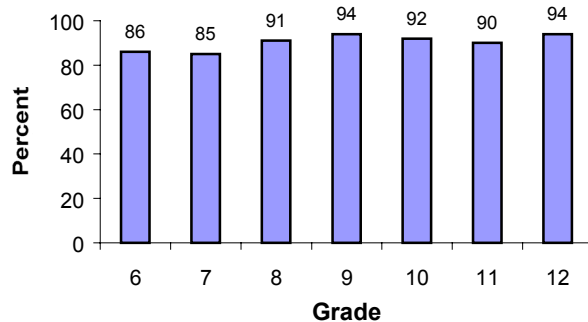


Figure 10. Believe health risks of smoking 1-5 cigarettes a day, by grade, Wisconsin middle and high school students



- Eighty-seven percent of middle school and 92% of high school students perceived that cigarettes are harmful, even smoking 5 or fewer cigarettes a day.
- This risk was well known, showing a range of 85% of seventh graders to 94% of twelfth graders.
- There was not significant variation among males and females on this question.

❖ *"Can people get addicted to using tobacco just like they can get addicted to using cocaine and heroin?"*

Response Options were: (a) definitely yes; (b) probably yes; (c) probably not; and (d) definitely not.

Grouping of Respondents for Figures 11 and 12: students who thought tobacco is addictive were defined as responding either (a) definitely yes or (b) probably yes.

Figure 11. Believe they can become addicted to tobacco, by gender, Wisconsin middle and high school students

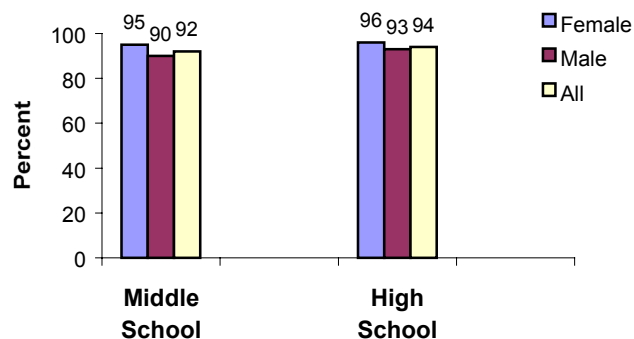
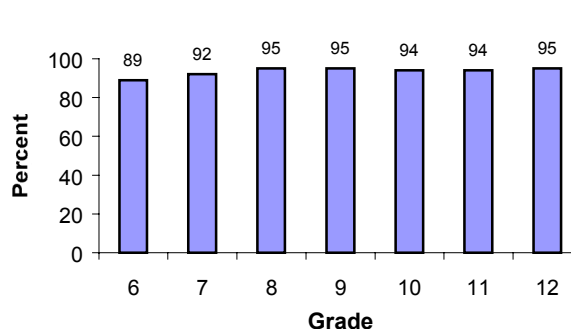


Figure 12. Believe they can become addicted to tobacco, by grade, Wisconsin middle and high school students



- Over 9 out of 10 students in grades 7-12 perceived that tobacco is addictive.
- This perception was at or above 94% from grade 8 through grade 12.
- Combining the results of the four tables above in this section, the majority of students appeared to realize that smoking even 5 or fewer cigarettes a day was harmful and also perceived that tobacco is addictive.

❖ *"Do you think it is safe to smoke for only a year or two, as long as you quit after that?"*

Response Options were: (a) definitely yes (b) probably yes (c) probably not (d) definitely not.

Grouping of Respondents for Figures 13 and 14: the percent of students who thought it was safe to smoke for a year or two, then quit, was defined as responding either (a) definitely yes; or (b) probably yes.

Figure 13. Believe it is safe to smoke for a year or two, then quit, by gender, Wisconsin middle and high school students

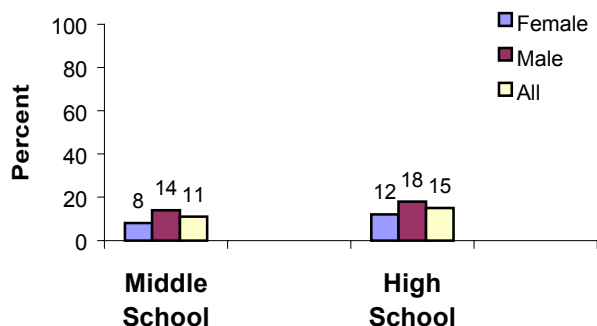
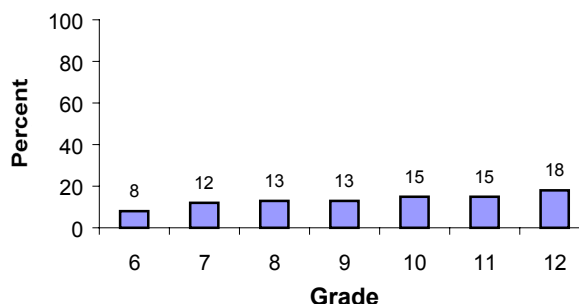


Figure 14. Believe it is safe to smoke for a year or two, then quit, by grade, Wisconsin middle and high school students



- Some students (11% of middle school and 15% of high school students) thought it was still safe to smoke for a year or two, if you then quit.
- Males were more likely than females to have this belief in both middle school (14% versus 8%) and in high school (18% versus 12%).
- There is a steady increase in the percentage of students who feel it is safe to smoke for a year or two and then quit.

Section Discussion: Belief of Health Risks of Smoking

Very high rates of students understood that there was a health risk to smoking and that tobacco use can be addictive. The data strongly supports the idea that most students are aware of some type of health hazard and the risk of addiction.

By the 12th grade, 95% of 12th grade students recognized that even low amounts of smoking had a health risk.

However, in this same age group close to one fifth of students (18%) still felt that they could smoke for 1-2 years without any health risk. Such thinking goes against all known evidence on the health risks of smoking.

Discussion of Tobacco Use with a Parent or Guardian

Questions and Definitions

Middle and high school students were asked the following questions:

❖ *"Have either of your parents (or guardians) discussed the dangers of tobacco use with you?"*

Response Options were: (a) mother or female guardian only; (b) Father or male guardian only; (c) both; and (d) neither

Grouping of the Respondents for Figures 15 and 16: students who discussed the use of tobacco with a parent or guardian was defined as responding either (a) mother (female guardian) only; (b) father (male guardian) only; or (c) both.

Results

Figure 15. Students who have discussed tobacco use with parent or guardian, by gender, Wisconsin middle and high school students

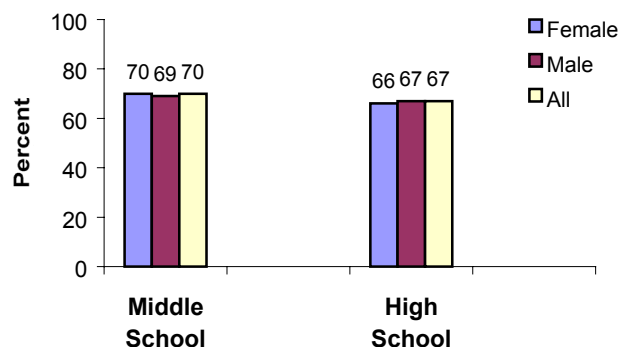
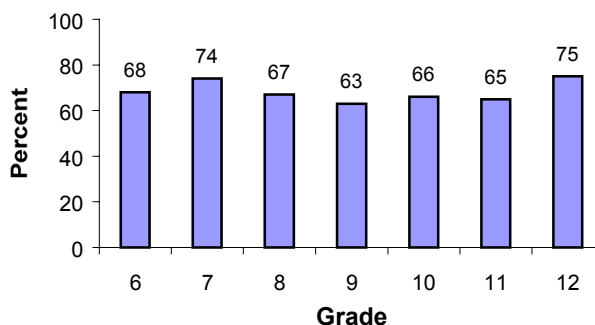


Figure 16. Students who have discussed tobacco use with a parent or guardian, by grade, Wisconsin middle and high school students



- Seventy (70%) percent of middle and 67% of high school students discussed the dangers of tobacco use with at least one parent or guardian.
- There was no statistical significant difference between female and male students.
- A range of 63% of ninth graders to 75% of twelfth graders responded they had discussed the tobacco dangers with their parent(s) or guardian(s).

Section Discussion: Discussion of Tobacco Use with a Parent or Guardian

This data suggests that while the majority of parents or guardians discuss smoking with their teenagers, there remains a significant percentage that does not. According to the CDC Office of Smoking and Health other states have seen similar results. Various causes have been postulated:

Among some parents, there may be a perception that smoking usage as not harmful a health issue. It is also not perceived as a large a legal issue as drugs or alcohol. Parents or guardians may also believe that

schools are providing this education. Also, there may be some parents who are not aware of the dangers themselves. Finally, some teenagers do not communicate in general with their parents on many issues.⁸

⁸ Personal Communication, Peter D. Rum, MD, MPH, with the Office of Smoking and Health and the Section on Adolescent Health, CDC Mar 2001.

Behavioral Intent to Smoke

Questions and Definitions

Behavioral intent to smoke (this is a term that attempts to define the probability that one expects to smoke in the future) among never-smokers (those who have never smoked) was determined by combining several serial responses to several questions regarding their intent to smoke.

Middle school and high school students were asked four questions **as a group** to assess their current smoking status and smoking intentions.

❖ *"Have you ever tried cigarette smoking, even one or two puffs?"*

The Response Options were (a) yes; (b) no.

❖ *"Do you think you will try a cigarette soon?"*

Response Options were (a) I have already tried smoking cigarettes; (b) yes; (c) No.

❖ *"Do you think you will smoke a cigarette anytime in the next year?"*

Response options were (a) definitely yes; (b) probably yes; (c) probably not; (d) definitely not.

❖ *"If one of your best friends offered you a cigarette, would you smoke it?"*

Grouping of Responses for Figures 17 and 18: the following series of related and grouped questions were used to design the graphs below:

The student had to answer all four questions to determine whether or not he or she was not likely to be a smoker in the future.

Note: answering yes or probably yes for any question (as applicable) put that student into the category of having a potential intent to smoke.

Results

Figure 17. Never-smokers' intent to smoke, by gender, Wisconsin middle and high school students

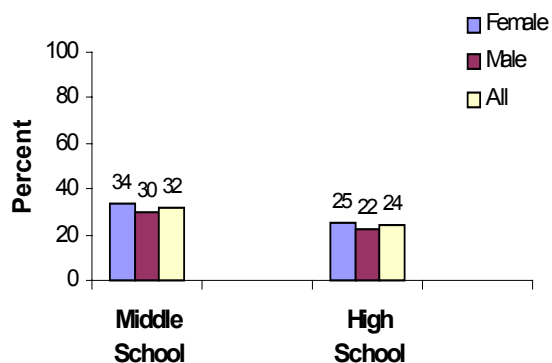
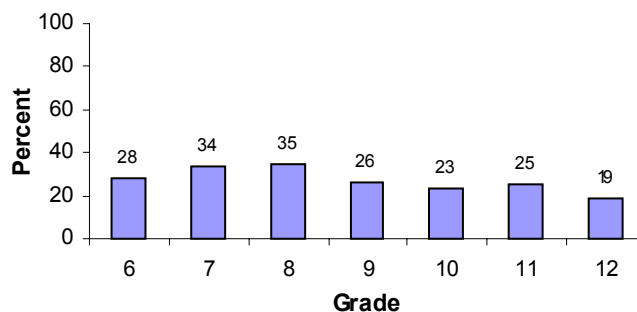


Figure 18. Never-smokers' intent to smoke, by grade, Wisconsin middle and high school students



- Among the students who had never smoked, 32% of middle and 24% of high school students indicated a probable intent to smoke.
- Risk of smoking initiation during the next year was at its highest in the middle school years (6th-8th grades).

Section Discussion: Behavioral Intent to Smoke

It is not well understood why middle school age students were more prone to consider smoking within the next year.

In fact, data published in the first 2000YTS Report documented that only 12% of middle school age students' smoke vs. 33% in the high school years.

Earlier in this report, the data demonstrated that middle school age students were actually less likely to think "smoking is cool" or have more friends or were exposed to students who smoke.

In 1999, Wisconsin started an important initiative targeted at preventing smoking initiation in middle age school students, The Thomas T. Melvin Youth Tobacco Prevention and Education Program.

This Program receives funding from the State of Wisconsin and is run by the Department of Health and Family Services. It is closely coordinated with other state efforts including the State Tobacco Control Board.

Key components of the Thomas T. Melvin Youth Tobacco Prevention and Education Program are:

- ◆ An integrated media campaign
- ◆ Community-based coalition efforts
- ◆ Department of Public Instruction school-based/school-linked efforts
- ◆ Evaluation of the Program Effectiveness

Perceptions of Smokers Compared to Never-Smokers

This section will attempt to demonstrate some differences in smoking exposure risks and perceptions of smoking behavior among those defined as smokers versus those who have never smoked.

Questions and Definition

Factors such as attitudes, beliefs, perceptions and knowledge base regarding the dangers of smoking (which were described in previous sections) were analyzed comparing the responses of current smokers to those of never-smokers.

The following two grouped questions were asked to determine smoking status into one of two categories: never smoker and current smoker

❖ *"Have you ever tried cigarette smoking, even one or two puffs?"*

Response Options were: (a) yes; (b) no

Grouping of Respondents for Figures 19 and 20: students who were never smokers were defined by responding, (b) no.

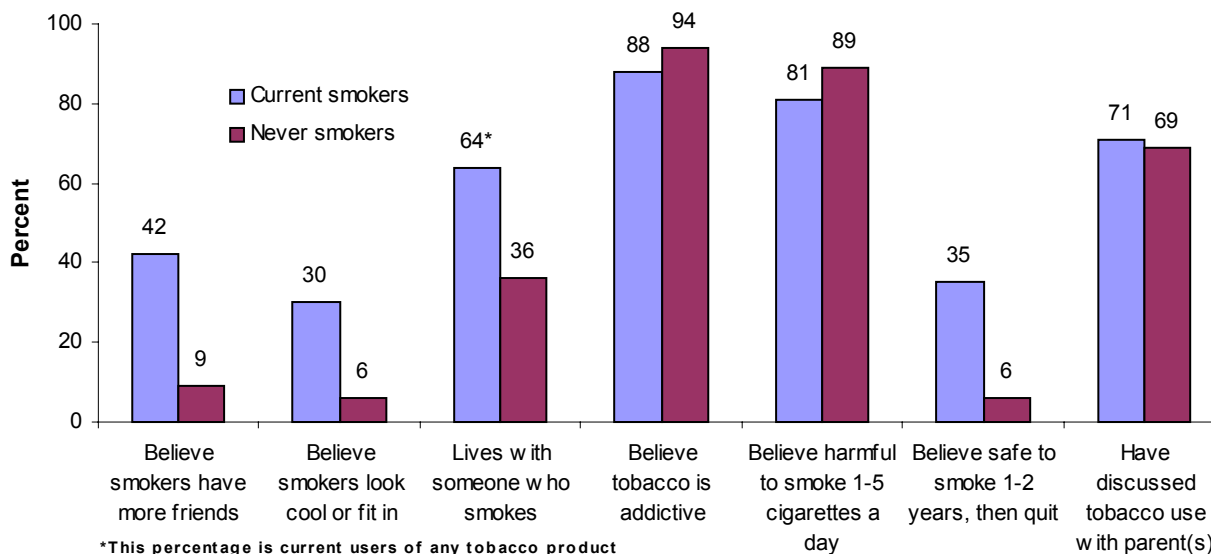
❖ *"During the past 30 days, on how many days did you smoke cigarettes?"*

Response Options were: (a) 0 days; (b) 1 to 2 days; (c) 3 to 5 days; (d) 6 to 9 days; (e) 10 to 19 days; (f) 20 to 29 days; and (g) all 30 days.

Grouping of Respondents for Figures 19 and 20: the students who stated that that they were current smokers were defined as having smoked on at least one day out of the previous 30 days.

Results

Figure 19. Student perceptions about smoking, by smoking status, Wisconsin middle school students

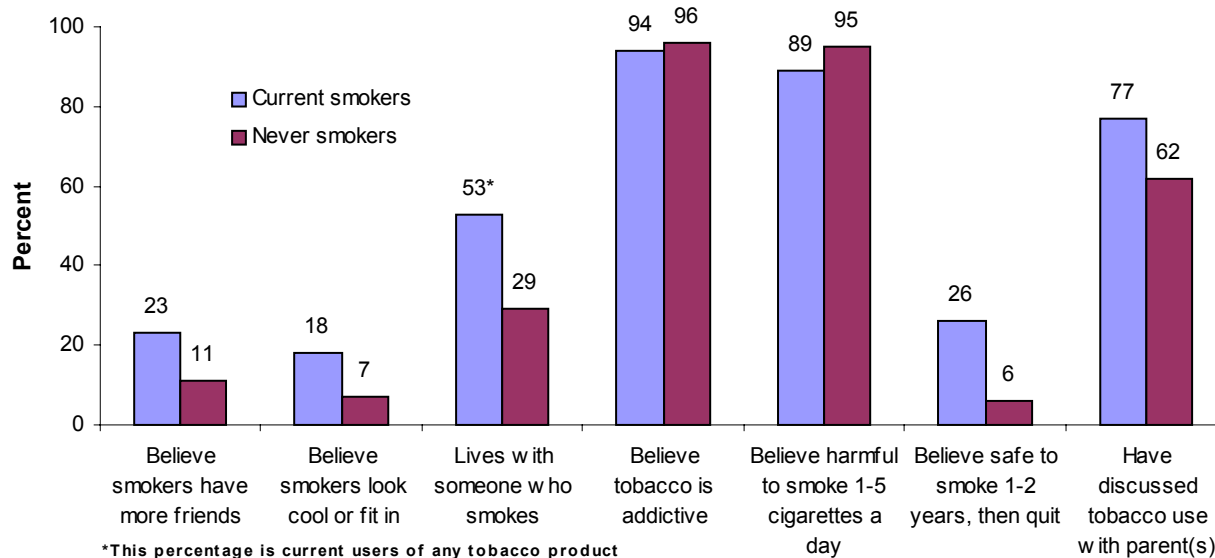


Middle School

- ◆ More current smokers than never-smokers believed smokers had more friends (42% vs. 9%), and that smokers look cool or fit in (30% vs. 6%).
- ◆ Sixty four percent (64%) of students who are current tobacco users reported they were living in a house with someone who smoked compared with 36% of students who had never smoked.
- ◆ There was little difference in middle school between current smokers' and the never smokers perception that tobacco is addictive, or that it is harmful to smoke 1-5 cigarettes per day.
- ◆ Thirty five percent (35%) of middle school current smokers thought it was safe to smoke for a year or two then quit. This was compared to 6% of never smokers.
- ◆ Similar percentages of middle school current smokers (71%) and never smokers (69%) had discussed the danger of tobacco use with a parent or guardian.

High School

Figure 20. Student perceptions about smoking, by smoking status, Wisconsin high school students



- ◆ The percent of never smokers with positive images of smoking was lower in high school (18% vs. 30%) than in middle school.
- ◆ More current smokers than never-smokers in high schools think that smokers have more friends (23% vs. 11%) and that smokers look cool or fit in (18% vs. 7%).
- ◆ Twenty-six (26) percent of high school current smoker's think it is safe to smoke for a year or two and then quit compared to 6% of never smokers.

-
- ◆ More high school current smokers (77%) than never-smokers (62%) had discussed the dangers of tobacco use with a parent or guardian.

Section Discussion: Perceptions of Smokers vs. Never-Smokers

The data suggested that there was a difference among current smokers and never smokers as far as three perceptions in middle vs. high school students (believe smokers have more friends; believe smokers look cool or fit in; or feel that it is safe to smoke in 1-2 years).

The data was suggestive that those current smokers who actually started smoking prior to high school were more likely than those who started in high school. Those students most susceptible.

As the last section discussed, this is also the age group that seems most prone to consider initiating smoking in the next year.

Both age groups had a fairly substantial difference in smoking rates in those that are exposed to smoking in the home. Never smokers in this study, appeared to be at risk from at home tobacco use (this one question examined exposure to any tobacco product in the home) behavior.

There is very little difference in smoking rates among both groups in those students who received parental counseling on smoking and those that did not.

Parental use of tobacco, in contrast, seemed to be more predictive of teenage modeling of smoking initiation and continued usage.

Table 1. Knowledge, beliefs, and social influences about smoking among middle school students, by students smoking status, Wisconsin Youth Tobacco Survey - 2000.

Knowledge, Beliefs, Social Influences	Number of Students	Gender		Grade			Total % (CI)
		Female % (CI)	Male % (CI)	6 th % (CI)	7 th % (CI)	8 th % (CI)	
<i>Believe smokers have more friends</i>	1,428	15.3 (+3.5)	17.7 (+2.9)	10.5 (+3.4)	19.3 (+3.3)	19.3 (+5.3)	16.6 (+2.7)
<i>Current smoker</i>	174	30.3 (+12.6)	54.2 (+10.9)	**	45.1 (+13.5)	39.4 (+14.0)	42.2 (+10.3)
<i>Never-smoker</i>	808	10.3 (+3.8)	7.5 (+3.2)	5.4 (+2.5)	12.7 (+4.9)	9.7 (+5.3)	8.8 (+2.9)
<i>Believe smokers look cool or fit in</i>	1,430	10.9 (+2.9)	12.5 (+2.7)	6.6 (+2.8)	14.7 (+2.7)	13.7 (+4.1)	11.7 (+2.1)
<i>Current smoker</i>	175	25.4 (+9.1)	35.1 (+9.9)	**	35.8 (+17.3)	28.5 (+6.0)	30.2 (+6.9)
<i>Never-smoker</i>	807	5.9 (+2.7)	6.5 (+2.2)	4.6 (+2.0)	9.0 (+4.1)	5.6 (+3.5)	6.2 (+2.0)
<i>One or more smokers among closest friends</i>	1,412	27.6 (+NA)	26.9 (+NA)	13.0 (+NA)	29.6 (+NA)	37.0 (+NA)	27.3 (+NA)
<i>Lives with someone who smokes cigarettes</i>	1,413	48.5 (+4.5)	43.0 (+5.1)	43.1 (+5.3)	46.4 (+6.4)	46.8 (+6.2)	45.7 (+3.9)
<i>Current tobacco user</i>	227	66.5 (+7.9)	62.7 (+8.4)	**	62.8 (+10.8)	66.3 (+8.2)	64.1 (+5.0)
<i>Never-smoker</i>	798	39.4 (+6.1)	32.4 (+6.0)	37.1 (+5.8)	35.5 (+8.2)	33.5 (+6.3)	35.7 (+4.3)
<i>Believe harmful to smoke 1-5 cigarettes/day</i>	1,427	89.3 (+3.8)	85.5 (+3.7)	85.7 (+4.8)	84.9 (+6.6)	91.2 (+1.9)	87.4 (+3.2)
<i>Current smoker</i>	175	82.6 (+7.0)	78.8 (+9.5)	**	78.9 (+9.5)	84.3 (+6.8)	80.7 (+6.3)
<i>Never-smoker</i>	805	91.8 (+3.6)	86.6 (+5.3)	87.6 (+4.9)	86.7 (+7.4)	93.7 (+2.6)	89.1 (+3.5)
<i>Perceive tobacco is addictive</i>	1,414	94.5 (+2.3)	90.3 (+2.9)	89.2 (+3.7)	92.0 (+4.3)	95.4 (+2.0)	92.2 (+2.3)
<i>Current smoker</i>	173	88.4 (+7.1)	86.9 (+6.0)	**	88.4 (+10.0)	92.3 (+3.7)	87.7 (+5.3)
<i>Never-smoker</i>	805	96.1 (+2.5)	91.0 (+3.5)	90.3 (+4.2)	93.6 (+4.4)	97.9 (+1.9)	93.5 (+2.4)
<i>Perceive safe to smoke for 1-2 years, then quit</i>	1,433	8.0 (+1.7)	14.0 (+2.5)	8.1 (+2.8)	11.9 (+3.1)	12.8 (+3.0)	11.1 (+1.8)
<i>Current smoker</i>	176	30.4 (+9.9)	39.4 (+10.4)	**	34.0 (+15.1)	33.1 (+8.0)	34.9 (+7.4)
<i>Never-smoker</i>	808	3.3 (+2.0)	8.5 (+2.1)	5.6 (+2.6)	6.5 (+3.4)	6.4 (+3.5)	6.1 (+1.5)
<i>Have discussed tobacco use with parent/guardian</i>	1,428	69.9 (+3.1)	69.4 (+5.7)	68.2 (+5.8)	74.2 (+5.8)	67.0 (+5.2)	69.8 (+3.9)
<i>Current smoker</i>	177	70.4 (+8.0)	72.0 (+9.0)	**	68.6 (+9.2)	76.2 (+8.4)	71.2 (+6.4)
<i>Never-smoker</i>	806	69.1 (+4.3)	68.7 (+6.3)	68.9 (+5.7)	76.5 (+7.1)	60.7 (+6.1)	68.9 (+3.5)
<i>Never-smokers' intent to smoke</i>	809	33.9 (+5.9)*	29.9 (+5.2)	28.0 (+9.6)	34.0 (+6.1)	34.8 (+7.2)	31.8 (+4.4)

*Ninety-five percent confidence interval (See Methods – this is a range of values that we believe the true value falls)

** Sample size less than 50 students in this category – See Methods for why this is statistically accepted practice

Table 2. Knowledge, beliefs and social influences about smoking among high school students, by smoking status, Wisconsin Youth Tobacco Survey - 2000.

Knowledge, Beliefs, Social Influences	Number of Students	Gender		Grade				Total %
		Female % (CI)	Male % (CI)	9 th % (CI)	10 th % (CI)	11 th % (CI)	12 th % (CI)	
<i>Believe smokers have more friends</i>	1,289	13.7 (+2.5)	18.3 (+3.7)	21.8 (+5.2)	17.2 (+3.3)	12.8 (+4.6)	12.6 (+4.4)	16.3 (+2.5)
<i>Current smoker</i>	418	16.0 (+4.3)	30.0 (+5.5)	36.2 (+10.5)	26.5 (+9.0)	17.2 (+7.1)	14.8 (+7.8)	22.7 (+3.8)
<i>Never-smoker</i>	441	11.5 (+5.2)	10.7 (+3.3)	15.2 (+6.9)	8.9 (+3.3)	8.1 (+4.7)	9.8 (+8.2)	11.1 (+2.4)
<i>Believe smokers look cool or fit in</i>	1,294	10.2 (+2.0)	14.7 (+2.8)	11.7 (+3.9)	15.6 (+4.0)	10.3 (+3.5)	13.1 (+3.6)	12.7 (+2.0)
<i>Current smoker</i>	421	11.8 (+3.7)	23.7 (+5.4)	19.8 (+6.5)	24.9 (+10.1)	11.3 (+8.9)	15.1 (+4.5)	17.5 (+3.9)
<i>Never-smoker</i>	441	7.7 (+3.4)	5.6 (+3.1)	5.7 (+4.2)	7.1 (+2.5)	7.2 (+5.1)	6.7 (+3.5)	6.6 (+1.8)
<i>One or more smokers among closest friends</i>	1,291	57.9 (+NA)	55.7 (+NA)	48.1 (+NA)	54.8 (+NA)	62.3 (+NA)	62.8 (+NA)	56.6 (+NA)
<i>Lives with someone who smokes cigarettes</i>	1,284	43.7 (+6.3)	42.1 (+5.2)	47.1 (+10.1)	41.2 (+7.6)	41.6 (+5.7)	39.4 (+6.4)	42.9 (+5.1)
<i>Current tobacco user</i>	501	53.1 (+8.4)	53.4 (+5.2)	63.6 (+8.0)	54.1 (+8.2)	49.5 (+10.3)	46.5 (+8.3)	53.4 (+4.9)
<i>Never-smoker</i>	440	28.0 (+9.5)	28.7 (+8.6)	24.4 (+11.2)	29.0 (+14.4)	31.6 (+12.4)	31.0 (+11.8)	28.5 (+8.1)
<i>Believe harmful to smoke 1-5 cigarettes/day</i>	1,294	94.7 (+1.7)	90.5 (+3.0)	93.8 (+3.7)	91.9 (+3.8)	90.0 (+4.1)	93.9 (+3.4)	92.4 (+2.2)
<i>Current smoker</i>	421	93.4 (+2.1)	84.7 (+5.2)	86.7 (+9.9)	88.0 (+5.9)	86.8 (+5.1)	94.3 (+5.1)	89.0 (+3.1)
<i>Never-smoker</i>	442	96.8 (+2.3)	94.2 (+3.9)	99.4 (+1.2)	93.7 (+7.0)	94.6 (+6.8)	92.0 (+7.5)	95.4 (+2.8)
<i>Perceive tobacco is addictive</i>	1,286	96.4 (+1.2)	92.6 (+2.9)	95.0 (+3.0)	93.8 (+3.7)	93.7 (+3.0)	94.9 (+2.2)	94.3 (+1.7)
<i>Current smoker</i>	422	96.8 (+2.2)	91.1 (+5.2)	94.2 (+5.5)	91.2 (+5.7)	94.4 (+4.5)	95.0 (+3.9)	93.8 (+2.7)
<i>Never-smoker</i>	438	97.6 (+1.4)	93.9 (+4.2)	97.4 (+2.4)	96.6 (+4.9)	93.3 (+7.3)	93.7 (+6.0)	95.5 (+2.5)
<i>Perceive safe to smoke for 1-2 years, then quit</i>	1,298	12.2 (+2.6)	18.1 (+3.6)	13.3 (+4.1)	14.7 (+4.0)	14.6 (+4.4)	18.3 (+5.8)	15.2 (+2.8)
<i>Current smoker</i>	422	21.0 (+4.7)	30.9 (+5.6)	29.4 (+7.7)	26.3 (+8.4)	26.6 (+9.0)	21.0 (+8.4)	25.8 (+4.1)
<i>Never-smoker</i>	442	4.3 (+2.8)	7.5 (+3.2)	4.0 (+3.4)	2.4 (+2.8)	6.9 (+4.2)	13.7 (+8.3)	6.0 (+2.4)
<i>Have discussed tobacco use with parent/guardian</i>	1,298	66.1 (+3.4)	67.1 (+2.8)	62.5 (+4.6)	65.8 (+4.9)	64.5 (+5.6)	74.8 (+4.9)	66.6 (+2.4)
<i>Current smoker</i>	424	76.3 (+6.3)	78.5 (+5.3)	69.5 (+9.0)	74.9 (+7.3)	73.9 (+7.9)	88.8 (+8.1)	77.4 (+4.2)
<i>Never-smoker</i>	443	60.3 (+6.8)	63.0 (+7.0)	63.6 (+7.2)	64.1 (+10.7)	52.8 (+11.7)	66.4 (+9.4)	61.8 (+5.0)
<i>Never-smokers' intent to smoke</i>	443	25.1 (+5.2)	22.2 (+6.0)	25.5 (+9.1)	22.5 (+5.9)	25.3 (+10.3)	19.4 (+10.7)	23.5 (+4.3)

Ninety-five percent confidence interval (CI). See also Methods, this is a range of values in which statisticians have demonstrated that there is a 95% chance that the stated value is actually within a range of potential values. For example if the percent is 25 and the CI is 5, the 95% confidence interval/range is between 20 and 30.